

## **REMARKS**

With entry of this Amendment, claims 45-76 and 81-88 are pending in this application. Claims 1-44 and 70-76 are cancelled without disclaimer of or prejudice to the subject matter recited therein. Claims 77-80 are withdrawn from further consideration as non-elected claims in view of the restriction requirement.

### **Claims 47 and 57 Are Definite**

The Examiner rejects claims 47 and 57 under 35 U.S.C. § 112, second paragraph, alleging that the term "A:B linkage" is indefinite. Without acquiescing in the rejection and without intending to change the scope of the claims, Applicants amend claims 47 and 57 to replace "A:B linkage" with "a first binding reagent attached to said substrate that can specifically bind to a second binding reagent attached to said electrode." Support for the amendment may be found in the specification at pages 12-13 and in figures 3 and 4 (figure legends at pages 9-10).

Because the claims as amended are not indefinite, Applicants respectfully request withdrawal of the rejection of claims 47 and 57 under 35 U.S.C. § 112, second paragraph.

### **Claims 45-47, 50, and 52-53 Are Not Anticipated by EP 0 570518**

The Examiner rejects claims 45-47, 50, and 52-53 under 35 U.S.C. § 102(b) as allegedly being anticipated by EP 0 570518 to Leland *et al.* ("Leland"). The Examiner alleges that the method disclosed on page 6, lines 10-26 of Leland anticipates independent claims 45 and 46.

Leland describes a method and apparatus for conducting binding assays that measure the presence of an analyte of interest using electrochemiluminescence. In Leland, the analyte of interest remains bound to the assay-performance-substance.

See Leland, page 6, lines 10-11 and 16-22. Applicants amend independent claims 45, 46, and 50 to recite that the "activity is not part of the product" as in the binding assay of Leland. Leland thus does not anticipate the amended claims. Similarly, Leland does not anticipate claims 47 or 52-53, which depend from claims 45, 46, and 50.

Support for the amendment may be found in the specification. For example, at page 5, lines 1-2 and 13-14, describing a "method for measuring the amount or activity of an enzyme in a sample that catalyzes the cleavage of a molecule ..." and a "method for measuring the amount or activity of an enzyme in a sample that catalyzes the joining of two or more substrates to form a product ...". In both methods, the activity is not bound to the product. Specification at page 5, lines 13-14.

Applicants respectfully request the reconsideration and withdrawal of the rejection of claims 45-47, 50, and 52-53 as anticipated by Leland under 35 U.S.C. § 102(b).

Claims 45-76 Are Not Anticipated by United States Patent No. 5,866,434

The Examiner rejects claims 45-76 under 35 U.S.C. § 102(e) as allegedly being anticipated by United States Patent No. 5,866,434 to Massey *et al.* ("Massey"). With respect to independent claims 45-46 and 50, the Examiner alleges that the methods disclosed in col. 13, lines 9-54, anticipate independent claims 45-46 and 50. With respect to independent claims 55 and 60, the Examiner alleges that the methods disclosed in col. 14, lines 20-36, anticipate independent claims 55 and 60.

As above with Leland, Massey describes a binding assay where the analyte of interest remains bound to the assay-performance-substance. See Massey, col. 13, lines 9-57. Applicants amend independent claims 45-46 and 50 to require that the

“activity is not part of the product” as in the binding assay of Massey. Massey also describes methods and apparatus for conducting assays in which a luminescent label is cleaved from a graphitic nanotube. Applicants amend independent claims 55, 56, and 60 to state that the “electrode is not a carbon electrode” like the graphitic nanotubes of Massey. Massey thus does not anticipate the amended claims. Similarly, Massey does not anticipate claims 47-49, 51-54, 65-69, 81-82, and 85-88 which depend from claims 45-46 and 50.

Applicants respectfully submit that *In re Johnson* and *In re Wertheim* make clear that an applicant may exclude by proviso any species in a claim disclosed in the specification. *In re Johnson*, 194 U.S.P.Q. 187 (C.C.P.A. 1977) and *In re Wertheim*, 191 USPQ 90, 98 (CCPA 1976). According to M.P.E.P. § 2173.05(i),

Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims.

M.P.E.P. § 2173.05(i) (citation to *In re Johnson* omitted); *see also In re Wertheim*.

Here, carbon electrodes are disclosed in the specification at page 14, top paragraph. This proviso is therefore fully supported by the specification, and therefore no new matter has been added by this amendment.

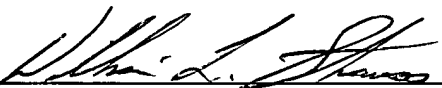
In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: April 18, 2005

By:   
William L. Strauss  
Reg. No. 47,114